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Date: <u>September 12, 2008</u>	Name: <u>Sheryl L. Hutchings</u>	Signature: <u>Sheryl L. Hutchings</u>

Attorney Docket No. 11336/602

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Mark Spellman )  
Patent No.: 7,373,123 ) Examiner: Lana Le  
Issue Date: May 13, 2008 )  
Serial No.: 10/789,599 ) Group Art Unit: 2618  
Filing Date: February 27, 2004 )  
For: MULTIPLE TUNERS IN A SINGLE )  
RADIO RECEIVER )

**SUPPLEMENTAL REQUEST FOR CERTIFICATE OF CORRECTION**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Attn: Decisions & Certificate of Corrections Branch

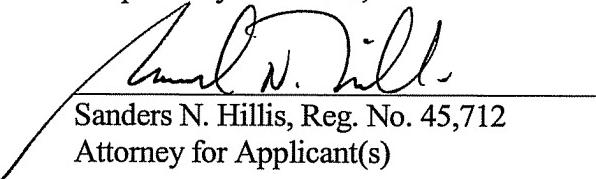
Sir:

In response to the Post-Issue Communication – Request for Certificate Denied, mailed August 7, 2008, Applicant respectfully submits herewith a copy of Applicant's Response to Non-Final Office Action filed on March 14, 2007, showing that the word -- tuner -- was added to then pending Claim 18, and not the word -- timer -- as printed in the issued Claim 13 of the patent.

Applicant respectfully requests that a Certificate of Correction be issued for the above-identified patent to correct this error as listed on the accompanying Form PTO-1050. This request is being made pursuant to 35 U.S.C. § 254, since the error comprises a typographical error by the Patent and Trademark Office.

Respectfully submitted,

Date: SEPT 12, 2008

  
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**UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION**

PATENT NO.: 7,373,123  
APPLICATION NO.: 10/789,599  
ISSUE DATE: May 13, 2008  
INVENTOR(S): Mark Spellman

Page 1 of 1

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

**In the Claims**

In column 6, line 65, please delete "timer" and insert -- tuner --.

MAILING ADDRESS OF SENDER (Please do not use customer number below):

PATENT NO. 7,373,123

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This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450.

Certificate Under 37 CFR 1.8(a)

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Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on  
March 14, 2007.

*Deanna L. Hasler*  
Deanna L. Hasler

**COPY**

PATENT

Our Case No. 11336/602 (P04021US)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of )  
Mark Spellman ) Group Art Unit: 2618  
Serial No.: 10/789,599 ) Examiner: Lana N. Le  
Filed: February 27, 2004 ) Conf. No. 9045  
For: MULTIPLE TUNERS IN A SINGLE )  
RADIO RECEIVER )

RESPONSE TO NON-FINAL OFFICE ACTION

MAIL STOP AMENDMENT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450  
Sir:

In response to the non-Final Office Action mailed November 14, 2006, please enter  
the following amendments, and consider the following remarks. Applicant's Response is  
being timely filed with a one (1) month extension of time, which is enclosed herewith.

Amendments to the Claims begin on page 2 of this paper.

Remarks begin on page 10 of this paper.

**Amendment to the Claims:**

This listing of Claims will replace all prior versions and listing of the Claims in the application:

**Listing of Claims:**

1. (Currently Amended) A radio receiver comprising:
  - a first tuner configured to connected with an antenna and to generate for generating a first audio signal;
  - a second tuner configured to connected with the antenna and to generate for generating a second audio signal;
  - a digital signal processor configured to receive the first audio signal and the second audio signal connected with the first tuner and the second tuner, to also digitally process where the first audio signal to generate a first processed audio output signal, and to also digitally process the second audio signal are processed by the digital signal processor to generate first audio output signal and a second processed - audio output signal;
  - a first audio power amplifier connected with the digital signal processor, and configured to receive the first processed audio output signal; and
  - a second audio power amplifier connected with the digital signal processor, and configured to receive the second processed audio output signal.
2. (Original) The radio receiver of claim 1 further comprising a control unit connected with the first tuner and the second tuner.
3. (Original) The radio receiver of claim 2 where the control unit is operable to generate a first tuner control output that is used to set the first tuner to a first selected frequency.
4. (Original) The radio receiver of claim 3 where the control unit is operable to generate a second tuner control output that is used to set the second tuner to a second selected frequency.

Response to Non-Final Office Action of Nov. 14, 2006  
Response dated March 14, 2007

5. (Currently Amended) The radio receiver of claim 1 where the first audio signal and the second audio signal are digitally processed simultaneously by the digital signal processor. a signal quality output signal is provided to a control unit by the first tuner.

6. (Currently Amended) The radio receiver of claim 5, where first tuner is configured to generate a first tuner signal quality signal, and where the control unit is configured to receive the first tuner signal quality signal, and to detect that the first tuner signal quality signal is less than a predetermined threshold of signal quality, and in response to the detection, operable to adjust the first tuner to an a first tuner alternate frequency setting, if a first frequency setting falls below a predetermined threshold of signal quality.

7. (Cancelled)

8. (Currently Amended) The radio receiver of claim 7-6, where the second tuner is configured to generate a second tuner signal quality signal, and where the control unit is further configured to receive the second tuner signal quality signal, and to detect that the second tuner signal quality is less than the predetermined threshold of signal quality, and in response to the detection, operable to adjust the second tuner to a second tuner an alternate frequency setting, if a first frequency setting falls below a predetermined threshold of signal quality.

9. (Currently Amended) The radio receiver of claim 1 further comprising a first radio data system decoder connected with the first tuner and a control unit, and the first radio data system decoder is configured to generate first tuner data related to the first tuner.

10. (Cancelled)

11. (Currently Amended) The radio receiver of claim 9 further comprises a display unit operably coupled to the control unit, and the control unit is configured to receive the first

tuner data and to control the display unit to display the first tuner data, 10 where the data is displayed on a display connected with the control unit.

12. (Currently Amended) The radio receiver of claim 11 further comprising a second radio data system decoder connected with the second tuner and the control unit, and the second radio data system decoder is configured to provide second tuner data related to the second tuner to the control unit, and the control unit is further configured to control the display unit to display the second tuner data.

13. (Cancelled)

14. (Cancelled)

15. (Original) The radio receiver of claim 1 where the first audio power amplifier is connected with at least one speaker.

16. (Original) The radio receiver of claim 1 where the second audio power amplifier is connected with a headphone jack.

17. (Original) The radio receiver of claim 1 where the first audio power amplifier is connected with a vehicle speaker system and the second audio power amplifier is connected with a headphone jack.

18. (Currently Amended) A radio receiver comprising:  
a control unit;  
a first tuner connected with the control unit, and the control unit configured to tune the first tuner capable of being tuned to a first tuner frequency setting;  
a second tuner connected with the control unit, and the control unit configured to tune the second tuner capable of being tuned to a second tuner frequency setting;  
a digital signal processor connected with the first tuner and the second tuner, and the digital signal processor configured to generate a first digitally processed audio signal as a

function of the first tuner frequency setting of the first tuner, and to also generate a second digitally processed audio signal as a function of the second tuner frequency setting of the second tuner;

a first audio power amplifier connected with the digital signal processor, and the first audio power amplifier is configured to receive the first digitally processed audio signal; and

a second audio power amplifier connected with the digital signal processor, and the second audio power amplifier is configured to receive the second digitally processed audio signal.

19. (Cancelled)

20. (Currently Amended) The radio receiver of claim 18 further comprising:

a first and second radio data system decoder connected with the respective first tuner and second tuner and configured to provide respective first and second tuner RDS data;  
the control unit is further configured to receive the respective first tuner RDS data and second tuner RDS data.

21. (Currently Amended) The radio receiver of claim 20 where the first tuner RDS data comprises radio data system decoder is configured to provide the control unit with a list of first tuner alternative frequencies for the first tuner frequency setting.

22. (Currently Amended) The radio receiver of claim 21 where the first tuner is configured to produce a first tuner signal quality signal, and the control unit is configured to receive the first tuner signal quality signal and to detect that the first tuner signal quality signal falls below a predetermined level of quality and, in response to the detection, to tune the first tuner to one of the listed first tuner alternate frequencies. frequency if a signal quality indication of the first tuner falls below a predetermined level of quality.

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Currently Amended) The radio receiver of claim 2225 where the second tuner RDS data comprises radio data system decoder is configured to provide the control unit with a list of second tuner alternative frequencies for the second tuner frequency setting.

27. (Currently Amended) The radio receiver of claim 26 where the second tuner is configured to generate a second tuner signal quality signal, and where the control unit is configured to detect that the second tuner signal quality output is less than a predetermined level of quality and, in response to the detection, to tune the second tuner to one of the listed second tuner alternate alternative frequencies. frequency if a signal quality indication of the second tuner falls below a predetermined level of quality.

28. (Cancelled).

29. (Currently Amended) The radio receiver of claim 26-28 further comprising a display unit operably coupled to the control unit, and the control unit further configured to control the display unit to display a portion of the first tuner RDS data and the second tuner RDS data, where the data is displayed on a display connected with the control unit.

30. (Currently Amended) The radio receiver of claim 18 where the first audio power amplifier is connected with a speaker system and the second audio power amplifier system is connected with a headphone jack.

31. – 34. (Cancelled)

35. (New) The radio receiver of claim 18 where the first audio power amplifier is connected with a vehicle speaker system and the second audio power amplifier is connected with a headphone jack.

36. (New) An audio system comprising:

first tuner and second radio tuners configured to generate respective first and second radio tuner audio signals;

a digital signal processor configured to generate a first processed audio signal based on the first radio tuner audio signal, and to generate a second processed audio signal based on the second radio tuner audio signal;

a first audio power amplifier configured to generate a first audio power amplifier signal based on the first processed audio signal; and

a second audio power amplifier configured to generate a second audio power amplifier signal based on the second processed audio signal.

37. (New) The audio system of claim 36 further comprising:

a first audio speaker configured to receive the first audio power amplifier signal; and  
a headphone interface configured to receive the second audio power amplifier signal.

38. (New) The audio system of claim 37 where the audio system is configured to be installed in a vehicle.

39. (New) The audio system of claim 37 further comprising:

a controller operably coupled to the first and second radio tuners, where the respective first and second radio tuners are configured to generate respective first and second radio signal quality signals;

first and second radio data system decoders operably coupled to the controller and the respective first and second radio tuners, the respective first and second radio data system decoders operable to provide respective first and second radio tuner RDS data that includes respective first and second tuner alternative frequencies; and

the controller is configured to receive the respective first and second radio tuner RDS data and the respective first and second radio signal quality output signals, and the controller is further configured to independently detect that the respective first and second radio signal quality signals are less than a predetermined threshold of signal quality and, in response to the respective detections, to independently tune the respective first and second radio tuners to

the respective first and second tuner alternative frequencies based on the respective detections.

40. (New) The audio system of claim 39 further comprising a display unit operably coupled to the controller; where the first and second radio tuner RDS data comprise respective first and second radio tuner RDS data parameters; and

the controller is configured to control the display unit to display a portion of the first and second radio tuner RDS data parameters.

41. (New) The audio system of claim 40 further comprising:

a user input device operably coupled to the controller and configured to receive a user command to independently control the respective first and second radio tuners.

42. (New) A method of providing two radio tuner audio outputs comprising:

receiving first and second radio tuner audio signals from respective first and second radios;

generating respective first and second digitally processed audio signal based on the respective first and second radio tuner audio signals;

generating respective first and second amplified processed audio signal based upon the respective first and second digitally processed audio signals;

generating respective first and second radio tuner signal quality signals related to the first and second radio tuner audio signals;

generating respective first and second quality detections in response to detection that the first and second radio tuner signal quality signals are less than a predetermined quality threshold value;

respectively tuning the first and second radio tuners to respective alternative frequencies in response to the respective first and second quality detections;

outputting the first amplified processed audio output to a speaker; and

outputting the second amplified processed audio output to a headphone interface adapted to provide the second amplified processed audio output to a headphone.

43. (New) The method of claim 42 further comprising:

generating respective first and second RDS data based on the first and second radio tuner audio signals, the respective first and second RDS data including the respective first and second alternative frequencies for the respective first and second radio tuner audio signals.

44. (New) The method of claim 43, where the first and second radios are located in a vehicle.

45. (New) The method of claim 44, where the speaker is positioned to provide audio to a driver of the vehicle.

46. (New) The method of claim 45, where the headphone interface is positioned to provide audio to a passenger of the vehicle.

**REMARKS**

Claims 1-6, 8-9, 11-12, 15-18, 20-22, 26-27, 29-30, and 35-46, are presently pending in the application. Applicant has amended Claims 1, 5-6, 8-9, 11-12, 18, 20-22, 26-27, and 29-30. Applicant has cancelled Claims 7, 10, 13-14, 19, 23-25, and 28 and added Claims 35-46. Applicant respectfully requests issuance of a notice of allowance for this application in view of the amendments to the claims and the following remarks. Applicant respectfully submits that new independent Claims 35 and 42 along with corresponding dependent claims are described in the specification, and are believed allowable over the cited references.

Applicant has organized the following response to correspond to the independent claims.

**A. Claim 1 and Claims dependent therefrom are allowable because the asserted combination does not describe each and every limitation of the respective claims.**

Claims 1-10, 12-13, and 15 were rejected pursuant to 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,910,996 to Eggers et al. (hereinafter referred to as "Eggers") in view of U.S. Patent No. 6,957,053 to Moers (hereinafter referred to as "Moers"). See Office Action, pg. 2. Claims 11 and 14 were rejected pursuant to 35 U.S.C. § 103(a) as being unpatentable over Eggers in view of Moers, further in view of U.S. Patent No. 6,038,434 (hereinafter referred to as "Miyake"). See Office Action, pg. 8. Claims 16-17 were rejected pursuant to 35 U.S.C. § 103(a) as being unpatentable over Eggers in view of Moers and further in view of U.S. Patent No. 5,661,811 (hereinafter referred to as "Huemann"). Claims 7, 10, and 13 are now cancelled, thereby rendering the corresponding rejections moot. Applicant respectively traverses the remaining rejections for at least the following reasons.

Amended Claim 1 describes the digital signal processor generating both a first processed audio output signal based on the first audio signal from the first tuner and also a second processed output signal based on the second audio signal from the second tuner. In addition, Claim 1 describes both a first audio power amplifier configured to receive the first processed audio output signal and a second audio power amplifier configured to receive the second processed audio output. Claim 1 is rejected based on Eggers in view of Moers, where the asserted combination substitutes Moers' DSP (6) for Eggers' switching circuitry (41). See,

Office Action, pg. 2. Yet, Eggers describes a switching circuitry (41) that merely selects between inputs to provide only one selected input as an output to amplifiers 42 and 43. *See* Eggers Abstract, Col. 2, ll. 25-28, col. 2, ll. 41-44, Col. 5, ll. 42-50, Col. 5, l. 65- Col. 6, l. 3, Col. 6, ll. 6-9, and Col. 6, ll. 39-42. Furthermore, Moers describes a DSP receiving an output from only tuner circuit (2). *See* Col. 4, ll. 7-9. As further shown in Moers' FIG. 1, DSP (6) provides a single audio output to amplifier (8); Moers' does not show DSP (6) generating a second audio output from Moers' second tuner (3). Thus, the asserted substitution of Moers' DSP (6) for Egger's switching circuitry (41) provides only a single audio output selectively derived from either, but not both, Egger's radio tuner (34) or radio tuner (35) to both of Eggers' amplifiers (42) and (43).

In contrast, Claim 1 describes the digital signal processor generating both first and second processed audio outputs from respective first and second audio signals provided by respective first and second tuners. Furthermore, unlike the asserted combination, Claim 1 also describes that the first audio power amplifier is configured to receive the first processed audio output and also the second audio power amplifier is configured to receive the second processed audio output. As a result, the rejection fails to establish *prima facie* obviousness because the asserted combination does not describe each and every limitation of Claim 1.

For at least these reasons, Applicant request allowance of Claim 1. In addition, Applicant submits that Claims 2-6, 8-9, 11-12, and 15-17 are also allowable at least for the reason that the respective dependent claims depend from an allowable claim.

**B. Claim 18 and corresponding dependent claims are allowable because the asserted combination does not describe each and very limitation of the respective claims.**

Claims 18-23 and 25-28 were rejected pursuant to 35 U.S.C. § 103(a) as being unpatentable over Eggers in view of Moers. *See* Office Action, pg. 2. Claims 24 and 29 were rejected pursuant to 35 U.S.C. § 103(a) as being unpatentable over Eggers in view of Moers, further in view of Miyake. *See* Office Action, pg. 8. Claims 30 and 33 were rejected pursuant to 35 U.S.C. § 103(a) as being unpatentable over Eggers in view of Moers and further in view of Huemann. Claims 19, 24-25, 28 and 33 are cancelled, thereby rendering

the corresponding rejections moot. Applicant respectfully traverses the remaining rejections for at least the following reasons.

Amended Claim 18 describes the digital signal processor configured to generate both a first digitally processed audio signal as a function the first tuner frequency setting and a second digitally processed audio signal as a function of the second tuner frequency setting. In addition, Claim 18 describes the first audio power amplifier is configured to receive the first digitally processed audio signal and the second audio power amplifier is configured to receive the second digitally processed audio signal. Applicant respectfully traverse the rejection's assertion that "Moers describes a digital signal processor (6) connected with the first tuner (3) and the second tuner (2)," *see* Office Action, pg. 6, because FIG. 1 shows that DSP (6) only receives a "baseband signal ... supplied via signal line (5) from an output of the first tuner (2)." *See* Moers Col. 5, ll. 7-9. In fact, Moers does not describe either Moers' second tuner (3) providing an audio signal to DSP (6) or Moers' DSP (6) providing a second baseband output corresponding to a second audio signal from Moers' second tuner (3).

Instead, Moers' DSP only receives an audio input from Moers' first tuner (2).

In contrast to Claim 18, Eggers describes switching circuitry (41) that selects between inputs to provide a single selected input as an output to both amplifiers (42) and (43). *See* Eggers Abstract, Col. 2, ll. 25-28, col. 2, ll. 41-44, Col. 5, ll. 42-50, Col. 5, l. 65- Col. 6, l. 3, Col. 6, ll. 6-9; and Col. 6, ll. 39-42. Also, Moers describes DSP (6) receiving one baseband signal from Moers' first tuner circuit (2). *See* Col. 4, ll. 7-9. Thus, unlike Claim 18, the asserted combination would not describe the digital signal processor further configured to generate both a first and a second digitally processed audio output as a function of the respective first and second tuner frequency setting because neither Moers nor Eggers describe providing a second digitally processed output as a function of a second tuner frequency setting. Moreover, the asserted combination would not describe both the first audio power amplifier configured to receive the first digitally processed audio signal and the second audio power amplifier configured to receive the second digitally processed audio signal, as described by Claim 18, because neither Eggers nor Moers describes a first and second digitally processed audio outputs to respective first and second power amplifiers as a function of the respective first and second tuners. Thus, the asserted combination fails to establish a

Serial No. 10/789,599  
Response to Non-Final Office Action of Nov. 14, 2006  
Response dated March 14, 2007

Filed: February 27, 2004

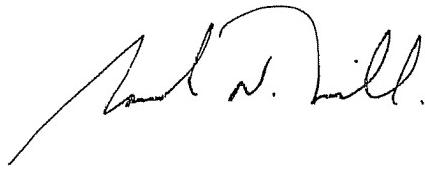
*prima facie* obviousness because the combination does not describe each and every limitation of Claim 18.

Therefore, for at least these reasons, Claim 18 is in form for allowance. Applicant also submits that dependent Claims 20-22, 26-27, and 29-30 are allowable at least for the reason that the independent Claim 18 is an allowable claim.

**Conclusion**

The application is believed to now be in condition for allowance, which Applicant earnestly requests. Should the Examiner deem a telephone conference to be beneficial in expediting examination and/or allowance of this application, the Examiner is invited to call the undersigned attorney at the telephone number listed below.

Respectfully submitted,



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